**Commercial Building Energy Alliances (CBEAs)**
**Lighting and Controls Supplier Summit**
**New York, NY**
**May 4, 2009**
**EXECUTIVE SUMMARY**

## Overview

On May 4, 2009, the Steering Committees of the Department of Energy's (DOE) Commercial Building Energy Alliances—retailer, hospital, and commercial real estate—hosted a Lighting and Controls Supplier Summit in New York. The summit brought together more than 100 building owners, operators, and suppliers to discuss ways to reduce buildings' energy consumption and greenhouse gas emissions.

## Mission and Goals

Supplier Summit participants supported CBEAs' mission to transform the energy efficiency of commercial buildings throughout the United States with a timely emphasis on retrofitting existing buildings. The goals of the Summit were to:

- Give building owners/operators the opportunity to communicate their energy efficiency needs, specifically in the areas of lighting and controls, directly to suppliers of lighting and controls equipment.
- Challenge suppliers to find innovative, cost-effective, market-ready ways to meet owners'/operators' needs.
- Promote continuous technology improvement and commercialization to transform the built environment.
- Encourage public and private partnerships to identify challenges and solutions faster and work together to speed them to market.

## Accomplishments

The Summit's presentations represented various perspectives across the buildings sectors:

- CBEAs – Dru Crawley, DOE
- Retailer – Amy Laughead-Riese, Macy's
- Commercial Real Estate – Kevin Kampschroer, General Services Administration
- Hospital – Brian Weldy, Hospital Corporation of America
- Commercial Lighting Solutions – Carol Jones, Pacific Northwest National Laboratory (PNNL)
- LED Site Lighting Performance Specification – Michael Myer, PNNL
- Technology Identification and Screening – Brad Hollomon, NREL

In addition, concurrent breakout sessions allowed small-group discussions of specific technology needs: interior lighting (general, display, and signage); retrofit technologies, outdoor area (site) lighting, and daylighting technologies and lighting controls. Brief synopses of each session are included in this summary.

Finally, a "speed-dating" activity connected suppliers with alliance members in a one-on-one setting. Suppliers who registered for this activity had the opportunity to network briefly with representatives from among 9 companies.

## Breakout Session Highlights

Each breakout session comprised a small panel of alliance members representing a variety of commercial building settings and a facilitator to host the discussion. Participants discussed key points, challenges/barriers, and possible opportunities and solutions. Overarching themes included the increased need for retrofit solutions and the openness to new ideas from suppliers.

### Interior Lighting (general, display, and signage)

Panel: Holly Northey, The Home Depot; Kevin Kampschroer, General Services Administration; Tristam Coffin, Whole Foods Market; Tom Martone, Whole Foods Market
Facilitator: Carol Jones, PNNL

Key ideas discussed by the Interior Lighting group:

- **Initial investment** is the biggest barrier to new lighting projects. Even if the ROI is there, stores are having a hard time, especially in this economy, finding the capital. Members asked manufacturers to look at creative financing, securing tax/utility incentives so stores don't have to put as much cash upfront.
- **Life Cycles and warranties** on LEDs aren't appealing enough to make the change. Members aren't interested in products that claim a 7-year life cycle but offer a 1- to 3- year warranty. Warranty needs to be at least 5 years and longer if the ROI is 7 years.
- **Educating managers** of independently managed stores about energy efficiency, latest technologies, and possible tax/utility incentives is important to influencing their purchasing decisions.

### Retrofit Technologies

Panel: Shannon Puckett, The Home Depot; Amy Laughead-Riese, Macy's; Kim Tisdale, Walmart
Facilitator: Dru Crawley, DOE

Key ideas discussed by the Retrofit Technologies group were:

- **Testing protocol, specifications, and warranty:** Members look for independent laboratory test results on all products and, in addition, perform their own testing before installing. Specifications differ depending on the use, but retailers expect products to live up to specs and ask manufacturers to warrant products for at least 5 years. Manufacturers should build "failure costs" into the bid.
- **ROIs:** Members are looking for an ROI of 2 years or less from more energy-efficient lighting products that fit into existing systems. They include maintenance in the ROI but NOT tax rebates as they find the cost of filling out the rebate paperwork is prohibitive.
- **LEDs:** Members have difficulty understanding manufacturers' claims on LEDs. They want to know color rendering, and they find the CRI index inadequate. They are looking for both cool and warm color temperatures, depending on the application, and color rendering higher than 90.

### Outdoor Area (site) Lighting

Panel: Ralph Williams, Walmart; Cheryl Penkivech, Target
Facilitator: Linda Sandahl and Michael Myer, both of PNNL

Key ideas discussed by the Outdoor Area Lighting group were:

- A significant portion of a store's energy use and maintenance costs is attributed to outdoor site lighting.
- **Safety** is a primary concern when evaluating outdoor lighting. Lighting must allow for facial recognition and the ability to identify cars and license plates from safety cameras. Lighting must also remain at a level at which customers feel safe.
- **LED Payback**: When considering payback, energy alone isn't enough to justify LEDs, maintenance costs must also be considered.

**Daylighting Technologies and Lighting Controls**
Panel: Bobbi Swatek, JCPenney; Brian Weldy, Hospital Corporation of America
Facilitator: Doug Brookman, Public Solutions; Tracy Meyer, PNNL

- **Daylighting** increases sales in retail and is seen as a benefit in hospitals. However, existing retail buildings construction don't allow for daylighting and hospitals need specific lighting levels for diagnosis and encounter problems with glare from floors.
- **The Human Factor:** A system override renders energy savings null and void. In addition, new building systems require specific expertise from facilities' staff so there is a hiring factor. In hospitals, user control is important, patients need to control lighting and shades from their beds.